IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

09/560,109

Confirmation No.:

3400

First Named Inventor:

Sallaway, Peter J.

Filing Date:

28 April 2000

Group Art Unit:

2734

Examiner:

Tran, K.

Atty. Docket No.:

M-5628 US

Title:

Detector For A Gigabit Ethernet Receiver

Assignee(s):

National Semiconductor Corporation

Mountain View, California 20 December 2004

MAIL STOP ISSUE FEE COMMISSIONER FOR PATENTS PO Box 1450 Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT FOR PLACEMENT IN PTO FILE

Sir:

Pursuant to 37 CFR 1.56, 1.97, and 1.98, each document listed on the accompanying substitute PTO Form 1449 is called to the attention of the Examiner for the above patent application. A copy of each listed document is enclosed.

The two Ungerboeck documents are cited on page 11 of the (original) specification (page C10 of the corrected substitute specification). Raheli et al. and Hagenauer et al. are respectively cited on pages 32 and 46 of the specification (pages C30 and C44 of the corrected substitute specification). Lin et al. constitutes the relevant portion of Lin and Costello cited on page 43 of the specification (page C41 of the corrected substitute specification).

Citation of each listed document shall not be construed as:

- 1. an admission that the document is necessarily prior art with respect to the instant invention;
- 2. a representation that a search has been made; or
- an admission that the information cited herein is, or is considered to be,
 material to patentability as defined in 37 CFR 1.56(b).

Ronald J. Meetin Attorney at Law 210 Central Avenue Mountain View, CA 94043-4869

Tel.: 650-964-9767 Fax: 650-964-9779 The Information Disclosure Statement ("IDS") submitted 8 January 2002 indicates that "English translations" of certain of the foreign patent documents accompanied that IDS. Applicants' Attorney is not presently able to determine the form or extent of those "English translations". In view of this, further enclosed is a copy of:

- a. An English abstract of German Patent Publication DE 19626076 A1 cited in the 8 January 2002 IDS;
- b. An English abstract of each of Japanese Patent Publications ("JPPs") 2-215236, 6-334692, 8-116275, 8-172366, 9-148944, and 9-153845 cited in the 8 January 2002 IDS; and
- c. A computer translation into English of the specification and claims, with Japanese drawings, of each of the following Japanese patent documents:
 - c1. JPP 08-031819, the examined version of JPP 02-215236;
 - c2. Japanese Patent 3399019, the registered version of JPP 06-334692; and
 - c3. JPPs 08-116275, 09-148944, and 09-153845.

Taking note of the fact that the Internet website of the Japanese Patent Office ("JPO") provides the computer translation into English of a Japanese patent document as a group of computer-translated portions of the document, Applicants' Attorney assembled the five listed documents from the computer-translated portions of examined JPP 08-031819, Japanese Patent 3399019, and unexamined JPPs 08-116275, 09-148944, and 09-153845 available at the JPO's Internet website. In so assembling the listed documents, Applicants' Attorney inserted the document identification information at the beginning of each listed document, skipped a line between each pair of consecutive paragraphs, placed equations on separate lines as those equations appear in the original Japanese documents, capitalized the first letter of the first word in the first line of several paragraphs where the capitalization was previously absent, and arranged the drawings in sequential order to the extent that they were not previously in sequential order.

The computer translations of examined JPP 08-031819, Japanese Patent 3399019, and unexamined JPPs 08-116275, 09-148944, and 09-153845 are somewhat coarse. For instance, the computer-translated English grammar is often rough. Also, superscripting and subscripting was lost in the translation process. Nevertheless, these computer translations should facilitate understanding JPPs 02-215236, 06-334692, 08-116275, 09-148944, and 09-153845. As provided by the JPO in its comments on the computer translations into English, a group of four consecutive asterisks (****) identifies material that could not be translated into English.

Ronald J. Meetin Attorney at Law 210 Central Avenue Mountain View, CA 94043-4869

Tel.: 650-964-9767 Fax: 650-964-9779 Also, U.S. Patent 5,859,861 cited in the 8 January 2002 IDS is the U.S. equivalent of German Patent Publication DE 19626076 A1.

As far as Attorney for Applicant(s) can determine, no document listed in the accompanying substitute PTO form 1449 is more material to the present invention than the prior art already of record. In particular, no so-listed document appears to impact the patentability of any claim allowed in the present application. The same comments apply to the German and Japanese documents dealt with above. Accordingly, please place this letter and the enclosures in the PTO file for the present application.

EXPRESS MAIL LABEL NO.:

EV 500 310 553 US

Respectfully submitted,

Ronald J. Meetin

Attorney for Applicant(s)

Renald J. Meetin

Reg. No. 29,089

210 Central Avenue Mountain View, CA 94043-4869

Ronald J. Meetin Attorney at Law 210 Central Avenue Mountain View, CA 94043-4869

Tel.: 650-964-9767 Fax: 650-964-9779

| J.S. Department of Commerce, Patent and Trademark Office | | | | | Atty Docket No. | | | Application No. | |
|--|--|--|-----------------|---------------------|-----------------|-------------|----------------------------------|------------------|-----------------|
| | | | | | M-5628 US | | | 09/560,109 | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT | | | | | Applicant(s) | | | Confirmation No. | |
| Substitute PTO Form 1449 | | | | | Sallaway et al. | | | 3400 | |
| | | | | | Filing Date | | | Group | |
| | | | | | 28 April 2000 | | | 2637 | |
| | | | U.S. F | Patent Documents | | - | | · | |
| *Examiner Initial | | Document Number | Date | Name | | Class | Subclass Filing Date Appropriate | | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | | | | | | | | |
| | AL | | | | | | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | | | Foreign | Patent Documen | ts | | | | |
| | | | | | | | | Translation | |
| | | Document | Date | Country | , | Class | Subclass | Yes | No |
| | AH | | | | | | | | |
| | ΑI | | · | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | OTHER A | RT (Including A | uthor, Title, Date, | Pertinent | t Pages, Et | c.) | | • |
| | AL Lin et al. Error Control Coding: Fundamentals and Applications (Prentice-Hall), 1983, pp. 315 | | | | | | | | 349 |
| | AM | AM Hagenauer et al. "A Viterbi Algorothm with Soft-Decision Outputs and its Applications", Procs. GLOBECOM '89, Nov. 1989, pp. 1680 -1686 | | | | | | | |
| | AN Raheli et al., "Per-Survivor Processing: A General Approach to MLSE in Uncertain Environment Trans. Comm., Feb./Mar./Apr 1995, pp. 354 - 364 AO Ungerboeck, "Trellis-Coded Modulation with Redundant Signal Sets, Part I: Introduction", IEEE Communications Mag., Feb. 1987, pp. 5 - 11 | | | | | | | | ts," <u>IEE</u> |
| | | | | | | | | | , |
| | AP | Ungerboeck "Trellis-Coded Modulation with Redundant Signal Sets, Part II: State of the Art", <u>IEEE</u> Communications Mag., Feb. 1987, pp. 12 - 21 | | | | | | | |
| | AQ | Viterbi, "Error Bounds for Convolutional Codes and an Asymptotically Optimum Decoding Algorithm", IEEE Trans. Info. Theory, Apr. 1967, pp. 260 - 269 | | | | | | | |
| | AR | | | | | | | | |
| xaminer | | | Date Considere | ed | | | | | |